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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,779	03/05/2002	Louis J. Lenick	Peer 104	8967

7590 12/16/2003

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EXAMINER

JOYCE, WILLIAM C

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,779

Applicant(s)

LENICK ET AL.

Examiner

William C. Joyce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to the communication filed September 22, 2003 for the above identified patent application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mansfield (USP 3,276,828) in view of Rose (USP 5,059,053).

Mansfield discloses a bearing assembly having an inner ring (1) mounted on a shaft (C), the inner ring having a plurality of fingers defined by slots (6), a compressible locking collar (D) positioned circumferentially about the fingers, the locking collar having a fastener screw operable for causing the locking collar to compress the fingers into locking engagement with the shaft.

Mansfield does not disclose the collar as having a large diameter and a small diameter, wherein the large diameter portion fits circumferentially about the fingers and the small diameter portion defines a radial wall for engaging an end wall of the fingers. It was known in the art to form a locking collar with a locating portion for positioning the collar with respect to a plurality of locking fingers. For example, Rose teaches a locking collar (20) having a large diameter portion and a small diameter portion, wherein the

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large diameter portion fits circumferentially about a plurality of fingers and the small diameter portion defines a radial wall for engaging an end wall of the fingers. Referring to the specification (column 4), Rose discloses the small diameter portion illustrated in the Figs. can be modified to have a different shape, length, or width, while still performing its positive stop function. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the locking collar of Mansfield with a small diameter portion, as taught by Rose, motivation being to provide means for properly locating the collar member with respect to a plurality of locking fingers.

3. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koss et al. (USP 4,403,814) in view of Rose (USP 5,059,053).

Koss et al. disclose a bearing assembly having an inner ring (14) mounted on a shaft (33), the inner ring having a plurality of fingers defined by slots (23), a locking collar (26) positioned circumferentially about the fingers, the locking collar having a fastener screw (29) operable for causing the locking collar to compress the fingers into locking engagement with the shaft.

Koss et al. do not disclose a compressible collar having a large diameter and a small diameter, wherein the large diameter portion fits circumferentially about the fingers and the small diameter portion defines a radial wall for engaging an end wall of the fingers. It was known in the art to positively lock two machine components using a compressible locking collar having a locating portion for positioning the collar with respect to a plurality of locking fingers. For example, Rose teaches a locking collar (20)

having a large diameter portion and a small diameter portion, wherein the large diameter portion fits circumferentially about a plurality of fingers and the small diameter portion defines a radial wall for engaging an end wall of the fingers. Referring to the specification (column 4), Rose discloses the small diameter portion illustrated in the Figs. can be modified to have a different shape, length, or width, while still performing its positive stop function. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the locking collar of Koss et al. with a compressible locking collar having large and small diameter portions, as taught by Rose, motivation being to provide means for positively locking two machine components while properly locating the collar member with respect to a plurality of locking fingers.

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (US Patent 5,630,671) in view of Rose (USP 5,059,053).

Larson illustrates in Figure 2 a bearing assembly having an inner ring (36,38) mounted on a shaft (50), the inner ring having a plurality of fingers defined by slots (40), a locking collar (44) positioned circumferentially about the fingers, the locking collar operable for causing the fingers to compress into locking engagement with the shaft.

Larson does not disclose a locking collar having a fastening screw, a large diameter, and a small diameter portion, wherein the large diameter portion fits circumferentially about the fingers and the small diameter portion defines a radial wall for engaging an end wall of the fingers. It was known in the art to positively lock two machine components using a compressible locking collar having a fastening screw and

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a locating portion for positioning the collar with respect to a plurality of locking fingers. For example, Rose teaches a locking collar (20) having a large diameter portion and a small diameter portion, wherein the large diameter portion fits circumferentially about a plurality of fingers and the small diameter portion defines a radial wall for engaging an end wall of the fingers. Referring to the specification (column 4), Rose discloses the small diameter portion illustrated in the Figs. can be modified to have a different shape, length, or width, while still performing its positive stop function. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the locking collar of Larson with a compressible locking collar having a fastening screw and a small diameter portion, as taught by Rose, motivation being to provide a collar having a greater compressing force for positively locking two machine components while properly locating the collar member with respect to a plurality of locking fingers.

Response to Arguments

5. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (703) 305-5114. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

 12/8/03
William C. Joyce